## **WHAT IS CLAIMED IS:**

1. Process for preparing compounds of the formula (I)

$$(R^F)$$
  $\xrightarrow{\text{CN}}$   $(I)$ 

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where

R<sup>1</sup> is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

A-B-D-E

(Ila)

A-E

(IIb)

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where, each independently,

A is absent or is a C<sub>1</sub>-C<sub>8</sub>-alkylene radical and

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B is absent or is oxygen, sulphur or NR<sup>2</sup>

where  $R^2$  is hydrogen or  $C_1\text{-}C_8\text{-alkyl}$  and

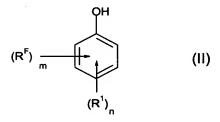
D is a carbonyl group and

- E is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, NH(C<sub>1</sub>-C<sub>8</sub>-alkyl) or N(C<sub>1</sub>-C<sub>8</sub>-alkyl)<sub>2</sub> or is a cyclic amino radical having 4 to 12 carbon atoms and
- 5 n is an integer of 0 to 4-m and
  - $\mathsf{R}^\mathsf{F}$  is fluorine,  $\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl}$ ,  $-\mathsf{O}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  or  $-\mathsf{S}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  and
- m is an integer of 1 to 3,

comprising

a) converting compounds of the formula (II)

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where R1 and RF, and also n and m, are as defined

in the presence of formaldehyde and in the presence of secondary amines of the formula (III)

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where R<sup>3</sup> and R<sup>4</sup> are each independently C<sub>1</sub>-C<sub>8</sub>-alkyl, or NR<sup>3</sup>R<sup>4</sup> as a whole is a cyclic amino radical having a total of 4 to 12 carbon atoms

to compounds of the formula (IV)

$$(R^{F}) \xrightarrow{m} (IV)$$

5 where R<sup>1</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>F</sup>, m and n, are as defined above, and

b) reacting the compounds of the formula (IV) with compounds of the formula (V)

10 R<sup>5</sup>CO-O-OCR<sup>5</sup> (V)

where the  $R^5$  radicals are each independently hydrogen,  $C_{1-1}$ -alkyl,  $C_{2-1}$ -alkenyl,  $C_{5-1}$ -aryl or  $C_{6-1}$ -arylalkyl

to convert them to compounds of the formula (VI)

$$(R^F)$$
  $R^5$   $(VI)$ 

where R<sup>1</sup>, R<sup>F</sup>, m and n are each as defined under formula (I) and

the  $R^5$  radicals are each independently hydrogen,  $C_1$ - $C_{12}$ -alkyl,  $C_2$ - $C_{12}$ -alkenyl,  $C_5$ - $C_{14}$ -aryl or  $C_6$ - $C_{15}$ -arylalkyl, and

- c) reacting the compounds of the formula (VI) with cyanide.
- 2. Process according to Claim 1, characterized in that R<sup>1</sup> is in each case independently C<sub>1</sub>-C<sub>4</sub>-alkyl, free or protected formyl, or chlorine.
  - 3. Process according to Claim 1, characterized in that n is 0 or 1.
- 4. Process according to Claim 1, characterized in that R<sup>F</sup> is fluorine,
   C<sub>1</sub>-C<sub>4</sub>-fluoroalkyl, -O(C<sub>1</sub>-C<sub>4</sub>-fluoroalkyl) or -S(C<sub>1</sub>-C<sub>4</sub>-fluoroalkyl).
  - 5. Process according to Claim 1, characterized in that R<sup>3</sup> and R<sup>4</sup> are each an identical C<sub>1</sub>-C<sub>8</sub>-alkyl radical.
  - 6. Process according to Claim 1, characterized in that R<sup>5</sup> is in each case identically hydrogen, C<sub>1</sub>-C<sub>12</sub>-alkyl, C<sub>2</sub>-C<sub>12</sub>-alkenyl, C<sub>5</sub>-C<sub>14</sub>-aryl or C<sub>6</sub>-C<sub>15</sub>-arylalkyl.
- 7. Process according to Claim 1, characterized in that the molar ratio of formaldehyde to compounds of the formula (II) in step a) is 0.8 to 10.
- 8. Process according to Claim 1, characterized in that the molar ratio of secondary amines of the formula (III) to compounds of the formula (II) in step a) is 0.8 to 10.
- Process according to Claim 1, characterized in that the molar ratio of compounds of the formula (V) to compounds of the formula (IV) in step a) is 1.5 to 10.

- 10. Process according to Claim 1, characterized in that alkali metal cyanides are used in step c).
- Process according to Claim 1, characterized in that, in a further step d), the compounds of the formula (I) are reacted with compounds of the formulae (VIIa) or (VIIb)

R<sup>5</sup>CO-X (VIIa) R<sup>6</sup>-Y (VIIb)

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where, in formula (VIIa),

- $\label{eq:R5} R^5 \quad \text{is hydrogen, $C_1$-$C_{12}$-alkyl, $C_2$-$C_{12}$-alkenyl, $C_5$-$C_{14}$-aryl, $C_6$-$C_{15}$-arylalkyl, $O(C_1$-$C_{12}$-alkyl), $O(C_5$-$C_{14}$-aryl), $O(C_6$-$C_{15}$-arylalkyl), $O(C_2$-$C_{12}$-alkenyl), $NH(C_1$-$C_{12}$-alkyl), $NH(C_5$-$C_{14}$-aryl), $NH(C_6$-$C_{15}$-arylalkyl), $N(C_1$-$C_{12}$-alkyl)_2, $N(C_5$-$C_{14}$-aryl)_2 or $N(C_6$-$C_{15}$-arylalkyl)_2, $, and $$$
- X is OCOR<sup>5</sup>, fluorine, chlorine, bromine or iodine, and 20 where, in formula (VIIb),
  - $R^6$  is  $C_1$ - $C_{12}$ -alkyl,  $C_5$ - $C_{14}$ -aryl or  $C_6$ - $C_{15}$ -arylalkyl and
- 25 Y is  $O_3SR^7$ , chlorine, bromine or iodine where  $R^7$  is  $C_1-C_{12}$ -alkyl,  $C_5-C_{14}$ -aryl or  $C_1-C_{12}$ -fluoroalkyl,

to give compounds of the formula (VIII)

$$(R^F)$$
  $(VIII)$ 

- R<sup>8</sup> is R<sup>5</sup>CO or R<sup>6</sup> as defined above, and R<sup>1</sup>, R<sup>F</sup>, m and n are each as defined under formula (I).
- 12. Process of Claim 1 for preparing compounds of the formula (I)

$$(R^{F}) \xrightarrow{m} CN \qquad (I)$$

- 10 where
  - R<sup>1</sup> is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

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A-E (IIb)

- where, each independently,
  - A is absent or is a C<sub>1</sub>-C<sub>8</sub>-alkylene radical and

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B is absent or is oxygen, sulphur or  $NR^2$ where  $R^2$  is hydrogen or  $C_1$ - $C_8$ -alkyl and

D is a carbonyl group and

E is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, NH(C<sub>1</sub>-C<sub>8</sub>-alkyl) or N(C<sub>1</sub>-C<sub>8</sub>-alkyl)<sub>2</sub> or is a cyclic amino radical having 4 to 12 carbon atoms and

n is an integer of 0 to 4-m and

 $R^{\text{F}}$  is fluorine,  $C_{1\text{-}}C_{12}\text{-}$  fluoroalkyl, -O(C  $_{1\text{-}}C_{12}\text{-}$  fluoroalkyl) or -S(C  $_{1\text{-}}$  C  $_{12}\text{-}$  fluoroalkyl) and

m is an integer of 1 to 3,

comprising reacting compounds of the formula (VI)

$$(R^F)$$
  $R^5$   $(VI)$ 

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where R1, RF, m and n are each as defined under formula (I) and

the  $R^5$  radicals are each independently hydrogen,  $C_1$ - $C_{12}$ -alkyl,  $C_2$ - $C_{12}$ -alkenyl,  $C_5$ - $C_{14}$ -aryl or  $C_6$ - $C_{15}$ -arylalkyl with cyanide.

13. Process for preparing compounds of the formula (VI)

$$(R^F)$$
  $(VI)$ 

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is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

A-B-D-E (IIa)

10 A-E (IIb)

where, each independently,

15 A is absent or is a C<sub>1</sub>-C<sub>8</sub>-alkylene radical and

B is absent or is oxygen, sulphur or  $\,NR^2\,$  where  $\,R^2$  is hydrogen or  $\,C_1\text{-}C_8\text{-alkyl}$  and

D is a carbonyl group and

E is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, NH(C<sub>1</sub>-C<sub>8</sub>-alkyl) or N(C<sub>1</sub>-C<sub>8</sub>-alkyl)<sub>2</sub> or is a cyclic amino radical having 4 to 12 carbon atoms and

 $\mathsf{R}^\mathsf{F}$  is fluorine,  $\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl}$ ,  $-\mathsf{O}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  or  $-\mathsf{S}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  and

m is an integer of 1 to 3 and

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 $R^5$  is in each case independently hydrogen,  $C_1$ - $C_{12}$ -alkyl,  $C_2$ - $C_{12}$ -alkenyl,  $C_5$ - $C_{14}$ -aryl or  $C_6$ - $C_{15}$ -arylalkyl,

comprising reacting compounds of the formula (IV)

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$$(R^{F}) \xrightarrow[m]{OH} NR^{3}R^{4}$$

$$(IV)$$

where R1 and RF, and also m and n, are as defined above and

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 $R^3$  and  $R^4$  are each independently  $C_1$ - $C_8$ -alkyl, or  $NR^3R^4$  as a whole is a cyclic amino radical having a total of 4 to 12 carbon atoms with compounds of the formula (V)

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where the R<sup>5</sup> radicals are as defined above.

14. Process for preparing compounds of the formula (IV)

$$(R^F)$$
  $(IV)$ 

is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

A-B-D-E (IIa)

10 A-E (IIb)

where, each independently,

- 15 A is absent or is a  $C_1$ - $C_8$ -alkylene radical and
  - B is absent or is oxygen, sulphur or  $\,NR^2\,$  where  $\,R^2$  is hydrogen or  $\,C_1\text{-}C_8\text{-alkyl}$  and

D is a carbonyl group and

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E is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, NH(C<sub>1</sub>-C<sub>8</sub>-alkyl) or N(C<sub>1</sub>-C<sub>8</sub>-alkyl)<sub>2</sub> or is a cyclic amino radical having 4 to 12 carbon atoms and

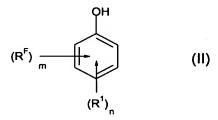
 $\mathsf{R}^\mathsf{F}$  is fluorine,  $\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl}$ ,  $-\mathsf{O}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  or  $-\mathsf{S}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  and

m is an integer of 1 to 3 and

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R<sup>3</sup> and R<sup>4</sup> are each independently C<sub>1</sub>-C<sub>8</sub>-alkyl, or NR<sup>3</sup>R<sup>4</sup> as a whole is a cyclic amino radical having a total of 4 to 12 carbon atoms,

10 comprising converting compounds of the formula (II)



where R1 and RF, and also n and m, are as defined above

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in the presence of formaldehyde and

in the presence of secondary amines of the formula (III)

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HNR<sup>3</sup>R<sup>4</sup> (III)

where R<sup>3</sup> and R<sup>4</sup> are as defined above.

15. Compounds of the formula (I)

$$(R^F)$$
  $(I)$ 

is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

A-B-D-E (IIa)

10 A-E (IIb)

where, each independently,

- 15 A is absent or is a C<sub>1</sub>-C<sub>8</sub>-alkylene radical and
  - B is absent or is oxygen, sulphur or  $\,NR^2\,$  where  $\,R^2$  is hydrogen or  $\,C_1\text{-}C_8\text{-alkyl}$  and

D is a carbonyl group and

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E is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, NH(C<sub>1</sub>-C<sub>8</sub>-alkyl) or N(C<sub>1</sub>-C<sub>8</sub>-alkyl)<sub>2</sub> or is a cyclic amino radical having 4 to 12 carbon atoms and

 $R^F$  is fluorine,  $C_1$ - $C_{12}$ -fluoroalkyl, -O( $C_1$ - $C_{12}$ -fluoroalkyl) or -S( $C_1$ - $C_{12}$ -fluoroalkyl) and

m is an integer of 1 to 3.

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- 16. Compounds of formula (I) according to Claim 15 selected from the group consisting of 2-hydroxy-5-fluorophenylacetonitrile, 2-hydroxy-4,5-difluorophenylacetonitrile, 2-hydroxy-5-trifluoromethoxyphenylacetonitrile, 6-hydroxy-2,3,4-trifluorophenylacetonitrile and 2-hydroxy-4-trifluoromethylphenylacetonitrile.
- 17. Compounds of the formula (IV)

$$(R^F)$$
  $R^3R^4$   $(IV)$ 

15 where

R<sup>1</sup> is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

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where, each independently,

A is absent or is a C<sub>1</sub>-C<sub>8</sub>-alkylene radical and

		В	is absent or is oxygen, sulphur or NR <sup>2</sup>
			where R <sup>2</sup> is hydrogen or C <sub>1</sub> -C <sub>8</sub> -alkyl and
5		D	is a carbonyl group and
		E	is $C_1$ - $C_8$ -alkyl, $C_1$ - $C_8$ -alkoxy, NH( $C_1$ - $C_8$ -alkyl) or N( $C_1$ - $C_8$ -alkyl) $_2$ or is a cyclic amino radical having 4 to 12 carbon atoms and
10		n is an integer of 0 to 4-m and	
1.5			orine, $C_1$ - $C_{12}$ -fluoroalkyl, -O( $C_1$ - $C_{12}$ -fluoroalkyl) or -S( $C_1$ -luoroalkyl) and
15		m is an	integer of 1 to 3 and
20		R <sup>3</sup> and R <sup>4</sup> are each independently C <sub>1</sub> -C <sub>8</sub> -alkyl, or NR <sup>3</sup> R <sup>4</sup> as a whole is a cyclic amino radical having a total of 4 to 12 carbon atoms,	
		with the exception of 2-hydroxy-5-fluoro-N,N-dimethylbenzylamine.	
25	18.	Compound of formula (IV) according to Claim 17 selected from the group consisting of 4,5-difluoro-2-hydroxy-N,N-dimehtylbenzylamine, 2-hydroxy-5-(trifluoromethoxy)-N,N-dimethylbenzylamine, 6 hydroxy-2,3,4-trifluoro-N,N-dimethylbenzylamine and 2-hydroxy-4-(trifluoromethyl)-N,N-dimethylbenzylamine.	
30	19.	Compounds of the formula (VI)	

$$(R^F)$$
  $(VI)$ 

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is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

A-B-D-E (IIa)

10 A-E (IIb)

where, each independently,

- A is absent or is a C<sub>1</sub>-C<sub>8</sub>-alkylene radical and
- B is absent or is oxygen, sulphur or  $NR^2$  where  $R^2$  is hydrogen or  $C_1$ - $C_8$ -alkyl and
- 20 D is a carbonyl group and
  - E is  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_8$ -alkoxy, NH( $C_1$ - $C_8$ -alkyl) or N( $C_1$ - $C_8$ -alkyl)<sub>2</sub> or is a cyclic amino radical having 4 to 12 carbon atoms and

 $\mathsf{R}^\mathsf{F}$  is fluorine,  $\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl}$ ,  $-\mathsf{O}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  or  $-\mathsf{S}(\mathsf{C}_1\text{-}\mathsf{C}_{12}\text{-}\mathsf{fluoroalkyl})$  and

m is an integer of 1 to 3 and

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- $R^5$  is in each case independently hydrogen,  $C_1$ - $C_{12}$ -alkyl,  $C_2$ - $C_{12}$ -alkenyl,  $C_5$ - $C_{14}$ -aryl or  $C_6$ - $C_{15}$ -arylalkyl, with the exception of 2-acetoxy-5-fluorobenzyl acetate.
- 20. Compounds of formula (VI) according to Claim 17 selected from the group consisting of 2-acetoxy-4,5-difluorobenzyl acetate, 2-acetoxy-5-(trifluoromethoxy)benzyl acetate, 6-acetoxy-2,3,4-trifluorobenzyl acetate and 2-acetoxy-4-trifluoromethylbenzyl acetate.
- 15 21. Compounds of the formula (VIIIa)

$$(R^{F})_{m}$$
 $(VIIIa)$ 

where

20 R<sup>1</sup> is in each case independently C<sub>1</sub>-C<sub>12</sub>-alkyl, free or protected formyl, chlorine or bromine or a radical of the formulae (IIa) or (IIb)

where, each independently,

- Α is absent or is a C<sub>1</sub>-C<sub>8</sub>-alkylene radical and
- is absent or is oxygen, sulphur or NR<sup>2</sup> 5 В where R2 is hydrogen or C1-C8-alkyl and
  - D is a carbonyl group and

Ε is  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_8$ -alkoxy,  $NH(C_1$ - $C_8$ -alkyl) or  $N(C_1$ -C<sub>8</sub>-alkyl)<sub>2</sub> or is a cyclic amino radical having 4 to 12 carbon atoms and

- 15 is an integer of 0 to 4-m and n
  - $R^F$ is fluorine, C<sub>1</sub>-C<sub>12</sub>-fluoroalkyl, -O(C<sub>1</sub>-C<sub>12</sub>-fluoroalkyl) or -S(C<sub>1</sub>-C<sub>12</sub>-fluoroalkyl) and
- 20 m is an integer of 1 to 3 and
  - $R^6$ is  $C_1$ - $C_{12}$ -alkyl,  $C_5$ - $C_{14}$ -aryl or  $C_6$ - $C_{15}$ -arylalkyl.
- 22. A process for preparing active ingredients for medicaments comprising providing compounds of Claim 15.
  - 23. A process for treating cardiovascular disordersor diseases comprising administering medicaments containing active ingredients based on compounds of Claim 15 to subjects in need thereof.

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